

Preventing, treating and living with traumatic brain injury (TBI)

The Role of Mindfulness, Meditation, and Prayer After Brain Injury

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For almost six years after her car crash in 1993, Melissa Felteau expended much of her energy wanting things to be different from what they were. She'd dream about her "old" self, only to wake up a new, confused, and confusing version of that self.

Prior to her crash, when she sustained a traumatic brain injury (TBI), she had been a master swimmer, a skier, and kayaker. She'd held a top job as director of public relations for Lakehead Psychiatric Hospital in Ontario, Canada, and she had a robust social life. Little seemed out of reach. But after her crash — at age 31 — she couldn't read or write. She had a hard time following conversations, and she couldn't get organized or remember anything. "It was a long, slow, painful, depressing recovery," she said.

Worst of all, the mental chatter in her head wouldn't quit. It was relentless — all the talking, criticizing, judging. "The injury was devastating to my selfimage. I told myself over and over that I was no longer loveable, that I was no longer good enough," says Melissa. "More than anything else, the brain injury left me with a residue of unworthiness — a deep soul wound. I was desperate to buoy myself back to myself, to find some kind of inspiration."

When a friend invited her to a yoga class to help with her persistent physical pain, Melissa discovered meditation. She felt a change immediately.

Learning to let go

The role of non-traditional treatments to help in recovery after brain injury is finding a more formal place in hospitals and rehabilitation centers. These treatments can include meditation, mindfulness, acupuncture, energy balance, biodfeedback, and craniosacral therapy (basically, gentle manipulation of the skull and its cranial sutures to enhance the circulation of the cerebrospinal fluid, and release restrictions in the connective tissue that protects the brain.)

"People tend to look at the brain after TBI as a damaged or pulled muscle, and that's not right. There is physical damage to the brain, yes, but there is also trauma to the brain that needs to be looked at neurologically and psychologically," says Rick Leskowitz, M.D., director of the Integrative Medicine Project at Spaulding Rehabilitation Hospital in Boston. "The use of integrative treatments is really interesting. Clearly, they have benefits for people. We don't know why or how they work, but we do know that they work and are therefore a very promising line of study."

At Spaulding, clinicians who have traditional degrees in medicine or rehabilitation therapies use integrative methods to treat the body, mind, and spirit of their patients with TBI or chronic pain, in addition to using traditional treatments. "Craniosacral therapy has proved to have high potential especially with people with TBI. We need more research, but the experiential data is quite telling," says Dr. Leskowitz. "After all, the skull moves. It is not a box. There is movement, pulsation along the sutures on the skull. When that pulsing is regular and steady, the brain is healthy. People trained in craniosacral therapy can loosen these restrictions to bring the pulsation back to normal." Research studies conducted more than 100 years ago by Dr. William Sutherland — the father of osteopathy in the cranial field — proved that cranial sutures were, in fact, designed to express small degrees of motion.

Mindfulness meditation — or mentally focusing on being in the present moment — has also proven an effective tool to help people with cognitive and behavioral issues after TBI. With meditation of all kinds — from chanting to visual imagery — people can make peace with their new self and not get swept up in the constant maelstrom of mental obsessions. "If you are truly living in the present moment, you can let go of the past and the future; they no longer have a hold on you. That can be incredibly freeing," says Dr. Leskowitz.

Transforming oneself

Within a few weeks of starting to meditate regularly, Melissa Felteau felt the benefits. It was as if a fog had started to lift, she says; as if once again she was the main character in her life, right there on stage. "My family noticed, too," she says. "I didn't have to withdraw as much; I could deal with more stimuli. I was less agitated, moody, and far less tired. That goes a long way with your mental outlook on life."

Since that first yoga class where she was introduced to meditation, Melissa has transformed. Wanting to learn more about the power of meditation and mindfulness, especially as they relate to healing after TBI, she went to study at the Omega Institute with Jon Kabat-Zinn, Ph.D., an internationally-known scientist, writer, and meditation teacher engaged in bringing mindfulness into the mainstream of medicine and society. Currently, Melissa is close to earning her master's degree in adult education and has collaborated on several studies looking at how mindfulness-based cognitive therapy can reduce symptoms of depression in people with TBI.

In a pilot study, Melissa and another facilitator worked with a group of almost twenty people of different ages, backgrounds, and brain injuries. "We taught mindfulness meditation, which, with practice, helps people learn to be present and aware of their thoughts, feelings, emotions, and sensations," she says. "People learn that by paying attention to their breathing, they can calm down their minds; and from there they can find a place to learn, to know that they have a choice to let judgments go, and to respond rather than react." Findings from the study showed that meditation can be an alternative to drug therapy for some people with depression after TBI. "All three of our small studies in neurotrauma have shown that almost 60 percent of study participants recover from clinical depression," she says. "In addition, their anxiety levels decrease and they report higher energy — all of which are significant findings for people who have suffered from the misery of depression."

Other research on the subject has shown that meditation changes the brain physiologically by reducing cortisol levels, which are associated with stress and depression.

Recently, Melissa and her research colleagues were awarded a grant by the Ontario Neurotrauma Foundation to conduct a larger multi-site randomized control study to look at meditation's effect on depression and memory after TBI.

Connecting anew to the self and others

"During our research, we have learned that mindful-based cognitive therapy also helps people with TBI connect to others. Their sense of isolation decreases significantly," Melissa says.

From his patients at Spaulding's Integrative Medicine Project, Dr. Leskowitz often hears about the "gift of TBI." "Some people say that they develop a new perspective on their life and their place in the world," he says. A brain injury may alter a father's life so he has more time to spend with his family and finds the simple joy in that. Or a type-A career woman, post-injury, discovers her artistic side and no longer misses the job she once thought was so crucial to her identity. "Like a blind person whose other senses become more acute, a person with TBI often develops a deeper intuition, a keener awareness about the world and the people around him," he adds.

The power of prayer

Navy chaplain and former Marine James "Tim" Williams also believes strongly in the role of spirituality in recovery. "When a young Marine or Sailor comes in to talk, my job is to listen. I may also try to steer our discussion to the unity of the mind, body, and soul," he says. Chaplain Williams works with the Wounded Warriors Battalion East (WWB-E) at Camp Lejeune in North Carolina. "God gave us all of that. And as a chaplain, I represent the third leg of that stool. I try to share my belief that using and developing one's faith can greatly enhance the recovery process.

"Many of these guys want to talk about their spirituality," Chaplain Williams says. "Sure, they're young, and maybe they never thought about their faith much before; but after being wounded or seeing their buddies killed, they look at life differently. How could they not? They realize they're not invincible; they begin to ponder their mortality." And Chaplain Williams has noticed that the more quiet time a Marine or Sailor spends meditating, praying, or being mindful, the more in tune he is with his recovery.

Chaplain Williams remembers one young corporal he visited at the burn center at Brooke Army Medical Center in San Antonio, part of WWB-E's territory. Among other injuries, he had been severely burned in combat on more than 55 percent of his body. "We got to know each other, and he told me about his experiences overseas," the chaplain says.

The corporal was facing the prospect of a series of plastic surgeries, which would be performed at the University of California Los Angeles. He wasn't sure he wanted to go through with plastic surgery — not knowing if the outcome would be better or worse. "Although he kept saying how grateful he was to be alive and to be reunited with his wife and two kids, he was very

anxious about the surgeries that loomed ahead," Chaplain Williams says. "So we prayed about it. Within several days, he decided to go to UCLA for the surgeries. After his decision, he came to thank me, telling me that I had helped him find a peaceful place to slow down his mind and listen to what he knew in his heart was right for him. He said he realized that having the surgeries would be a good thing; they would help him feel better about going out in public and, ultimately, help him regain his self-confidence. That corporal was an amazing young man. His courage and resilience are beyond words."

Breathe in, breathe out

Although to date no one has patented meditation in a bottle or the power of prayer or mindfulness in a daily pill, more and more, non-traditional treatments are being used in addition to or in lieu of traditional medicine. Nationally, more integrated medicine centers are opening in traditional hospitals and more research studies are being conducted. Scientists even meet with the Dalai Lama at the Mind Life Conference every two years to compare notes on how the mind works and to collaborate on testing insights gleaned from meditation.

And more people like Melissa Felteau are finding the effects of mindfulness and meditation the key to recovery — from TBI, chronic pain, and other conditions.

In 2008, Melissa was featured in a book called <u>Head Cases: Stories of Brain</u> <u>Injury and Its Aftermath</u> by Michael Paul Mason. Since its publication, Melissa has received many letters from other people with TBI and their family members. "They write to me about their challenges and sorrows ... as well as their forward steps," she says. "I always write back and try to give them hope and validate their sorrows. I also tell them about the power of meditation and being fully present in their lives. Those first six years after my injury would have been a world different had I known about meditation back then. But I am so grateful for how mediation and being mindful in my life continue to help me be my best self." Pondering this, she breathes in and out, then again, lengthening each breath as she does.

Three-Minute Breathing Space

Use this quick meditation whenever you need to settle yourself into awareness of the present moment.

Step 1: Becoming Aware

Try sitting up straight in a chair with feet lightly resting on the ground if possible. Closing your eyes, bring your awareness to your inner experience. Ask yourself:

- What is my experience right now?
- What thoughts are going through the mind?
- What feelings are here?
- Are there any sensations of tightness or stiffness?

Step 2: Gathering

As best you can, redirect your focus to your breathing – the feeling of the belly moving in and out, the belly expanding as the breath flows in, and falling back when the breath flows out. Follow the breath all the way in, and all the way out, using the breath to anchor yourself in the present moment.

Step 3: Expanding

Now breathe in to the whole body so you're expanding your awareness. Sense your body as a whole. Breathe in and out, feeling the whole body rise and fall with each inhalation and exhalation. Feel the body as a whole. Take in your whole body and your facial expression. Just as it is.

Adapted by Melissa Felteau from Williams, M., Teasdale, J., Segal, Z., Kabat-Zinn, J. (2007) The Mindful Way Through Depression. New York: Guilford Press.

http://www.brainline.org/content/2009/12/the-role-of-mindfulness-meditation-and-prayer-after-brain-injury_pageall.html